## PF-0460-2 CIP

## What is claimed is:

- 1. A substantially purified human Particularly Interesting New Cyc-His protein homolog (PINCH-PH) comprising a protein having an amino acid sequence of SEQ ID NO:1.
- 2. A purified antibody which specifically binds to the protein of claim 1.
- 3. The antibody of claim 2, wherein the antibody is selected from a polyclonal antibody, a monoclonal antibody, a chimeric antibody, a recombinant antibody, a humanized antibody, a single chain antibody, a Fab fragment, an  $F(ab')_2$  fragment, and  $F(ab')_2$  fragment.
- 4. A method of making a polyclonal antibody which specifically binds a protein, the method comprising:
- a) immunizing a animal with a protein having the amino acid sequence of SEQ ID NO: Funder conditions to elicit an antibody response;
  - b) isolating animal antibodies;
  - c) attaching the protein to a substrate;
- d) contacting the substrate with isolated antibodies under conditions to form an antibody:protein complex;
- e) dissociating the antibodies from the complex so formed, thereby obtaining polyclonal antibodies with the specificity of the antibody of claim 2.
- 5. A polyclonal antibody produced by the method of claim 4.
- 6. A method of preparing a monoclonal antibody which specifically binds a protein, the method comprising:
- a) immunizing a animal with a protein having the amino acid sequence of SEQ ID NO:1 under conditions to elicit an antibody response;
  - b) isolating antibody-producing cells from the animal;
- c) fusing the antibody-producing cells with immortalized cells in culture to form monoclonal antibody producing hybridoma cells;
  - d) culturing the hybridoma cells; and
  - e) isolating monoclonal antibodies from culture.
- 7. A monoclonal antibody produced by the method of claim 6.
- 8. A method for using an antibody to immunopurify a protein comprising:
  - a) attaching the antibody of claim 2 to a substrate,
- b) exposing the antibody to a sample containing protein under conditions to allow antibody:protein complexes to form,
  - c) dissociating the protein from the complex, and
  - d) collecting the purified protein.
- 9. A method for using an antibody to detect expression of a protein in a sample, the method comprising:
  - a) combining the antibody of claim 2 with a sample under conditions which allow the formation of

## PF-0460-2 CIP

antibody:protein complexes; and

- b) detecting complex formation, wherein complex formation indicates expression of the protein in the sample.
- 10. The method of claim 9 wherein the sample is biopsied tissue.
- 11. The method of claim 9 wherein the complex formation is compared with standards and is diagnostic of prostatic adenocarcinoma.
- 12. The method of claim 9 wherein the complex formation is compared with standards and is diagnostic of Hodgkin's disease.
- 13. A composition comprising an antibody of claim 2 and a labeling moiety.
- 14. A composition comprising an antibody of claim 2 and a pharmaceutical agent.
- 15. A method for treating prostatic adenocarcinoma, the method comprising administering the antibody of claim 2 to a subject in need of such treatment.
- 16. A method for treating a cancer, the method comprising administering the antibody of claim 2 to a subject in need of such treatment.
- 17. A purified agonist which specifically binds the protein of claim 1.
- 18. A purified antagonist which specifically binds the protein of claim 1.